Save Water/$ave Dollars

March Water Conservation Tip:

Irrigation Timer Rx for Healthy Plants & Wise Water Use

Spring is a good time to check your outdoor watering practices to make sure your yard plants remain healthy during the hot summer season. This will also help you use water wisely outside – where we use the most water, especially during the summer.

1. How much water is enough? – Check the efficiency of your irrigation system by using a soil probe. Soil probes can be purchased at many garden centers, or you can use a long metal rod or even a long screwdriver. Push the probe into the soil after an irrigation cycle. It will stop when it hits dry soil, giving you an idea of how deep your watering has penetrated. Over time, you will also learn how fast the soil dries out.

2. Adjust your irrigation timer – As the days become warmer, landscape plants will require more frequent watering due to the soil drying out quicker. Remember to keep the duration the same, just alter the frequency of the watering. Monitor the soil moisture depth and the length of time it takes to dry out with your probe. Adjust your irrigation timer slowly adjusting the water frequency as the days get longer and hotter.

3. Check your irrigation system for leaks – Manually run your system to look for broken irrigation lines, missing emitters, or broken or misaligned sprinkler heads. Replace dead plants that are still being watered, or remove the emitter and plug the line to avoid this waste of water. Check the number of emitters on each plant to help avoid over watering.

Need more help? The Tucson Water Zanjero Program can help you manage your water use at your home or business. Call 791-3242 to schedule an appointment to have a trained Water Conservation Specialist check your indoor and outdoor water use.

Your WATER Connection
News & Tips for Tucson Water Customers

A Reminder ...

Tucson Water's Automated Bill Payment Service is Available to Save You Time and Money

Make your water, sewer, or city garbage pickup payments automatically every month with Tucson Water's Automated Bill Payment Service. All you need is a valid checking or savings account, complete the application, and your payments will be automatically deducted each month from your account. You will still receive a statement from us and you'll save time and money every month. For more information and an application, visit our website at www.cityoftucson.org/water and click on "customer svcs" or call 791-3242.

On the Water Front

The costs of operations and maintenance,building new facilities and pipelines, replacing old ones, paying for electricity, maintaining our truck fleet, even buying light bulbs for offices – it all has to be carefully forecast and tracked when you're operating a billion dollar investment like Tucson's water system. Tucson Water's financial analysts,our management team,and our citizens advisory committee work diligently on the finances of the utility.

It's our responsibility to keep your water utility financially healthy. Here are several ways we're doing that.

Working More Efficiently

Our Maintenance Management Program (MMP) is a utility-wide effort to reexamine the way we do things and who does them with the goal of doing them better, faster, and at a lower cost.So far, the MMP has shown great results.It has helped us reduce the cost of operations and develop new streamlined procedures that save time and money.

Spreading the Cost of Infrastructure

We design and build our water system with additional capacity so that it will meet peak demands for many years into the future. When new users join the system they benefit from this investment,however, they have not paid to help build that extra capacity which makes their new water service possible. The System Equity Fee we have proposed,which has received tentative approval by the Tucson Mayor and Council, would ensure that new water connections pay a share of these costs. If it is approved in April, we will start implementing it this summer.

Lower Cost for Colorado River Water

The Central Arizona Water Conservation District,the group that manages our Colorado River water, has announced it may soon reduce the cost of the water to users like Tucson.This could represent a considerable savings to Tucson Water and our customers.

The bottom line is that the combination of these elements will allow us to change our financial plan and recommend fewer and lower water rate increases during the next few years. We'll make up the difference through reduced operating costs,the fee for new services and the reduced cost of our renewable water resource.I'll give you more details as we learn more about these new financial issues.Please remember that we will be working to make sure you and your family always have quality water at a reasonable price today and in the future.

David V. Modeer
Director,Tucson Water

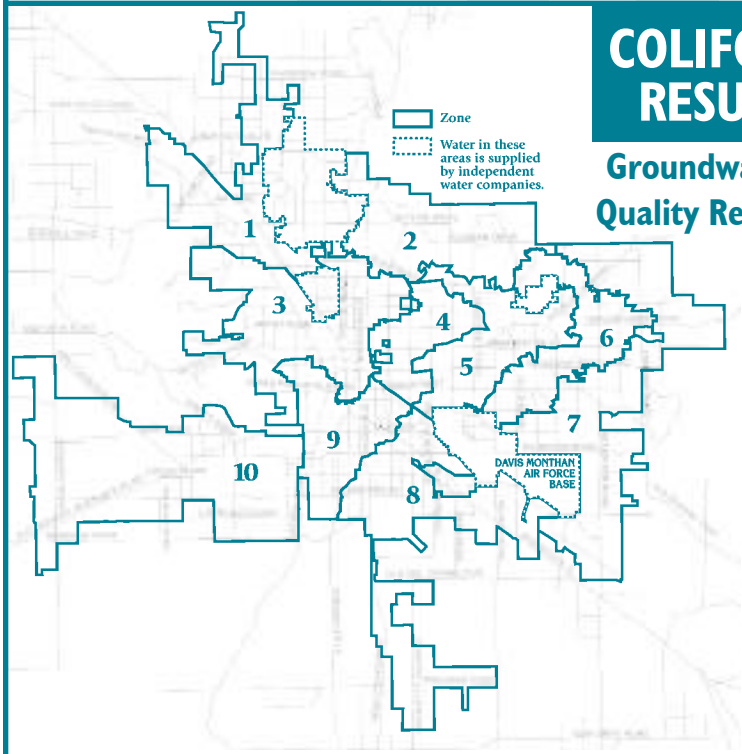
Clearwater Quality Report - February 2003

47	Sodium (ppm)
292.3	Mineral Content (ppm)
97*	Hardness (ppm)
8.1	pH (units)
Neg*	Coliform Bacteria
0.98	Chlorine level average (ppm)
80.1	Temp (deg F)

** Values for January 2003*

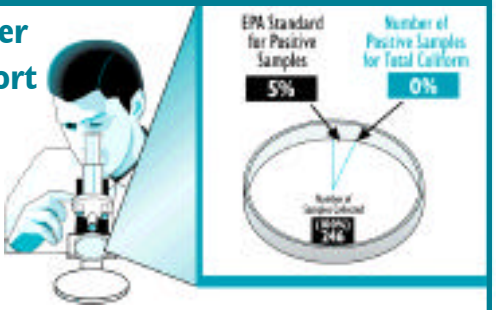
GROUNDWATER QUALITY REPORT - December 2002

	Water Quality Zone	1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (ppm)	Average	57	45	48	41	40	36	30	42	44	41	41
	Range	*37-95*	*40-47*	*25-62*	*29-52*	*33-46*	*23-46*	*24-44*	*37-46*	*38-52*	*39-42*	*23-95*
Mineral Content (ppm)	Average	390	287	324	243	244	237	220	330	247	213	268
	Range	*205-580*	*264-323*	*205-448*	*186-390*	*214-326*	*200-292*	*179-278*	*257-485*	*210-390*	*209-219*	*179-580*
Hardness (ppm)	Average	166	123	146	109	98	102	107	181	92	76	120
	Range	*73-249*	*107-141*	*96-214*	*74-154*	*80-119*	*79-116*	*84-124*	*98-289*	*73-126*	*75-77*	*73-289*
pH (units)	Average	7.5	7.9	7.6	7.7	7.8	7.8	7.8	7.7	7.7	7.6	7.8
	Range	*7.1-8.1*	*7.4-8.3*	*7.3-8.0*	*7.1-8.0*	*7.2-8.5*	*7.2-8.2*	*7.6-8.2*	*7.3-8.1*	*7.1-8.0*	*7.3-8.0*	*7.1-8.5*
Temperature (deg F)	Average	71	74	73	75	71	72	72	73	76	76	73
	Range	*66-76*	*65-81*	*68-80*	*68-82*	*57-80*	*64-80*	*64-79*	*62-78*	*67-82*	*66-83*	*57-83*

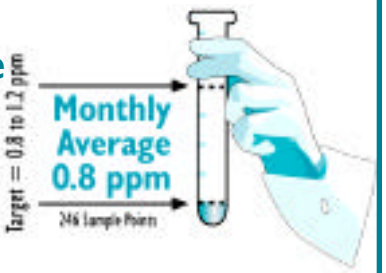


COLIFORM BACTERIA TESTING RESULTS - December 2002

Groundwater Quality Report



Chlorine Level Average



"PPM" means one part per million; 1 ppm = 1 teaspoon in 1,320 gallons

To give you a more accurate measurement of the water quality in your neighborhood, the Tucson Water service area has been divided into 10 zones based on differences in water pressure and water quality. For a detailed description of the zone boundaries, call 791-4331.

Water 101
Where Does Our Water Come From, Part 2

Tucson has three water sources – groundwater, Colorado River water, and reclaimed water. Last month we gave you some information about groundwater.

Colorado River Water

Colorado River water is one of our renewable water resources – unlike our groundwater supply, which is limited. Colorado River water comes from – yes, the Colorado River. Beginning high in the Rocky Mountains of Colorado and Wyoming, the River provides water for seven states including Arizona before it enters the Sea of Cortez in Mexico.

Tucson's portion of Colorado River water, about 45 billion gallons each year, comes to us through the Central Arizona Project canal, a 335-mile long channel that cost about $4 billion to build. Construction began in 1973 and took more than 20 years to complete.

We currently use about 10 billion gallons of Colorado River water a year. Most of this supply is put into specially constructed basins in Avra Valley at the Clearwater Renewable Resource Facility. Here the water sinks into the earth (recharges) and blends with the native groundwater beneath. This blend is then recovered by a number of wells and pumped through an 11 1/2-mile long pipeline to the Hayden-Udall Treatment Plant. From there it's piped to the Tucson Water distribution system. The use of this blended water has let us reduce our reliance on groundwater, put a number of wells in central Tucson on stand-by and allows our water table to begin recovering from decades of overpumping.

Expansion at Clearwater is nearly complete and, at full scale, will add about 19 1/2 billion gallons per year of blended water to our water system. More facilities will be needed in the future to use the remainder of our Colorado River water allocation.

Next month: Reclaimed Water

If you have a question you'd like to have answered as part of our Water 101 series, or if you have a suggestion for a topic, call us at 791-4331 or email to TW_Web1@ci.tucson.az.us.

Drought on the Colorado

Although we call our Colorado River water a renewable resource, the River is under great stress and the future could bring changes in the amount of water it can provide to us. Six other western states all vie with Arizona for water from the Colorado. The water allocations of these states accounts for just about all the water flowing in the Colorado. In addition, years of drought in Colorado have many scientists and water professionals concerned about the long-term outlook for the River and the many cities, towns, agricultural areas and industries that rely on it.

Tucson Water works with the Central Arizona Water Conservation District and other organizations to monitor the forecasts for the River and the political maneuverings by the states that share its water. These concerns serve as a reminder that even our renewable water supplies are not a given and that water conservation will always be important here in the desert.

Visit the Tucson Water Web Site at http://www.cityoftucson.org/water

Your Water Connection **is produced by Tucson Water. To receive a copy, or to receive this information in Spanish, call 791-4331 or mail your request to: Customer Information, P.O. Box 27210, Tucson, AZ 85726-7210.**

City of Tucson TTY number: 791-2639

Si usted desea este documento escrito en español, por favor, llame al 791-4331.

TUCSON WATER